



Vesuvius USA
495 Emma Street, Bettsville, Ohio 44815

Safety Data Sheet

BLU-RAM® HS PLASTIC	SDS Number SDS-30186 Revision: 4 Legacy Number: LES10072
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Preparation Information:

Site: All	Contact Deb Cook @ (419) 986-6714 for further product information or medical emergency during normal business hours.
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Section 1: Product and Company Identification

Product Name: BLU-RAM® HS PLASTIC	Chemical Name: Mixture	Formula: N/A	CAS Number: N/A
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Product Use: Advanced Refractories
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Supplier Information:

Supplier Name: Vesuvius USA	Supplier Phone: (419) 986-6714
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Supplier Address:

495 Emma Street Bettsville, OH 44815

Manufacturer Information:

Manufacturer Name: Vesuvius USA	Manufacturer Phone: (419) 986-6714
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Manufacturer Address:

495 Emma Street Bettsville, OH 44815

Emergency Contact Information:

CHEMTREC (800) 424-9300 (USA) CANUTEC (613) 996-6666 (CANADA)
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Section 2: Hazard(s) Identification

Hazard Classification: Skin Corrosion/Irritation - Category 2 Serious Eye Damage/Eye Irritation - Category 2 Carcinogenicity - Category 1A Specific Target Organ Toxicity, Single Exposure - Category 2 Specific Target Organ Toxicity, Repeated or Prolonged Exposure - Category 1			
Signal Word: Danger			
Hazard Statement(s): Causes skin irritation/corrosion Causes eye irritation May cause respiratory irritation May cause damage to lungs through prolonged or repeated exposure through inhalation , due to dust from cutting or tear-out. May cause cancer, silicosis			
Pictograms: 			
Precautionary Statement(s):			
Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Do not eat, drink, or smoke when using this product. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. In case of inadequate ventilation wear respiratory protection. Wear protective gloves/eye protection/face protection	Response If swallowed, rinse mouth. Do NOT induce vomiting. If eye irritation persists, remove contact lenses if necessary and rinse eyes with water. Seek medical attention if needed. If on skin (or hair), Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. If breathing is difficult, remove victim to fresh air and keep at rest in comfortable position, seek medical advice/attention. Wash contaminated clothing before reuse.	Storage Product contains chemicals, which will upon exposure to moisture result in product consolidation. Store in a dry place.	Disposal Check with local, state and federal regulations.
Hazards not Otherwise Classified: N/A			
Percentage of the mixture consisting of ingredients of unknown toxicity : N/A			

Section 3: Composition/Information on Ingredients

Ingredient:	CAS No. / Other Identifiers:	% Weight:
Cristobalite, Crystalline Silica	14464-46-1	12-18
Quartz, Crystalline Silica	14808-60-7	0.1-3
Aluminosilicate	1302-93-8	65-75
Aluminum Oxide, non-fibrous	1344-28-1	15-25
Blue Dye	147-14-8	<0.1
Phosphoric Acid	7664-38-2	0.1-1

Section 4: First Aid Measures

Emergency Overview: Some risk by inhalation. Prolonged skin contact may produce irritation /inflammation.
Potential Health Effects: Preexisting lung conditions such as , but not limited to bronchitis , emphysema, and/or asthma.
Chronic Health Hazards: Prolonged inhalation of product dust may cause lung damage . Prolonged and/or repeated inhalation of crystalline silica can cause silicosis of the lungs .
Medical Conditions Generally Aggravated by Exposure: Pre-existing skin and respiratory ailments .

Routes of Entry:

Eyes? Yes	Skin? Yes	Inhalation? Yes	Ingestion? No	Other? N/A
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Carcinogenicity:

NTP? No	IARC? Yes	OSHA? No	WHMIS? Yes	Other? N/A
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Details:

IARC has determined there is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica and so it is categorized as a Group 1 carcinogen. NTP has classified respirable crystalline silica as a known human carcinogen and ACGIH has classified it as a suspected human carcinogen .

Eye Contact: Immediately flush with water for at least 15 minutes. If irritation persists , consult physician .
Skin Contact: Immediately wash with cold water. If irritation persists , consult physician .
Inhalation: Remove person to fresh air. If problems persist, consult physician .
Ingestion: N/A

Section 5: Fire-Fighting Measures

Flash Point: N/A	Auto-Ignition: N/A	LEL: N/A	UEL: N/A
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NFPA Hazard Classification:

Health: 2	Flammable: 0	Reactivity: 0	Special Hazard: N/A
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HMIS Hazard Classification:

Health: 2	Flammable: 0	Reactivity: 0	PPE: E
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Extinguishing Media:

No special instructions or conditions .

Special Fire Fighting Procedures:

No special instructions

Unusual Fire and Explosion Hazards:

SENSITIVITY TO MECHANICAL IMPACT: N/A

SENSITIVITY TO STATIC DISCHARGE: N/A

OTHER: N/A

Section 6: Accidental Release Measures

Sweep or pick up with vacuum cleaner . Minimize dust levels and wear dust mask .

Section 7: Handling and Storage

Store in dry place below 150 degrees F. Minimize skin contact.

Section 8: Exposure Controls/Personal Protection

Exposure Limits Ingredient	PEL-OSHA	TLV-ACGIH	Other
Aluminosilicate	5 mg/M3 (respirable)	5 mg/M3 (Inhalable fraction)	N/A
Quartz, Crystalline Silica	0.05 mg/M3(respirable)	0.025 mg/M3 (respirable)	N/A
Cristobalite, Crystalline Silica	0.05 mg/M3 (respirable)	0.025 mg/M3 (respirable)	N/A
Phosphoric Acid	1 mg/M3	1 mg/M3	N/A
Aluminum Oxide, non-fibrous	5 mg/M3 (respirable)	1 mg/M3 (respirable)	N/A

Details:

N/A

Respiratory Protection:

If PEL/TLV is exceeded, use NIOSH approved mask/respirator for above listed ingredients .

Ventilation

LOCAL: N/A

SPECIAL: N/A

MECHANICAL: As required to maintain levels below the listed PEL /TLVs.

ENGINEERING CONTROLS: N/A

Protective Equipment:

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GLOVES: anti slip
EYE: safety glasses
CLOTHING: long sleeves and foot protection

Personnel Sampling Procedure:
N/A

PPE Symbols Displayed:



Section 9: Physical and Chemical Properties

	Chemical Properties
Appearance (physical state, color, etc.):	A blue, damp, moldable mixture of fine materials , some plastic fibers may be present
Odor:	Slight, pungent
Odor threshold:	N/A
pH:	2.5-3.5
Melting point/freezing point:	N/A
Initial boiling point and boiling range:	N/A
Flash point:	N/A
Evaporation rate:	N/A
Flammability (solid, gas):	N/A
Upper/lower flammability or explosive limits:	N/A
Vapor pressure:	N/A
Vapor density:	N/A
Relative density:	N/A
Solubility(ies):	3-5%
Partition coefficient: n-octanol/water:	N/A
Auto ignition temperature:	N/A
Decomposition temperature:	N/A
Viscosity:	N/A
Other Relevant Properties:	N/A

Section 10: Stability and Reactivity

Stability: Stable	Avoid: N/A
Reactivity: N/A	Avoid: N/A
Other: N/A	
Incompatibility: None	
Hazardous Decomposition of By-products None	
Polymerization: Will not occur	Avoid: N/A

Section 11: Toxicological Information

Chemical Name	% Wt.	LD50	LC50	Route of Exposure:	Short / Long Term Exposure Effects:	Known Carcinogen:
Phosphoric Acid	0.1-1	4400 mg/kg --oral rat	N/A	Skin	Burning/irritation	No
Quartz, Crystalline Silica	0.1-3	N/A	N/A	Inhalation	May cause lung cancer, silicosis. May cause damage to kidneys due to silicosis	Yes
Cristobalite, Crystalline Silica	12-18	N/A	N/A	Inhalation	May cause lung cancer, silicosis. May cause damage to kidneys due to silicosis	Yes

Other Studies:

N/A

Section 12: Ecological Information**Ecotoxicity:**

N/AV

Environmental Fate:

N/AV

Section 13: Disposal Considerations

Dispose of in accordance with local , state and federal regulations .

Section 14: Transport Information**International**

N/A

United States

N/A

Canada

SHIPPING NAME: N/A

P.I.N/UN: N/A

PRIMARY CLASS: N/A

SUBSIDIARY CLASS: N/A

PACKING GROUP: N/A

European Community

N/A

Section 15: Regulatory Information

US Federal Regulations

TSCA

All components of this product are included on the EPA TSCA Chemical Substance Inventory .

SARA 311 and 312 Hazard Categories:

Immediate (Acute) Health Hazard:	Yes
Delayed (Chronic) Health Hazard:	Yes
Fire Hazard:	No
Reactivity:	No
Sudden Release of Pressure:	No

SARA Section 313 Notification:

This product no contains toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Ozone Depleting Substances:

N/A

Volatile Organic Compounds (VOC):

N/A

US State Regulation:

California Prop 65: Crystalline Silica

Canadian Regulation:

WHMIS CLASSIFICATION: See GHS classifications in Section 2

This Product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

European Regulation:

N/A

Other Regulation:

CERCLA (RQ): Yes, Phosphoric Acid (5000lbs)

MITI:

N/A

N/A is Not Applicable

N/K is Not Known

N/AV is Not Available

Section 16: Other Information

Removal After Service/Tear-Out Precautions:

Because of the possible presence of crystalline silica in used refractory debris , particular care should be exercised during tear-out to minimise the generation of dust. Adherence to proper methods of dust suppression and control is imperative. The following precautions should be taken during tear-out.

- 1.) Employees should be apprised of the hazards and proper conditions and precautions for safe use or exposure .
- 2.) Approved respirators, in accordance with requirements of federal regulations , should be used for dust levels above established exposure limits for respirable crystalline silica .

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- 3.) Dust generation should be minimised by the use of dust control equipment or water spray .
- 4.) Wear protective clothing and vacuum clean prior to removing clothing .
- 5.) Where there is a possibility of exposure to dust containing respirable crystalline silica , the following warning should be posted .

FREE SILICA WORK AREA	AVOID BREATHING DUST
DUST MAY CAUSE DELAYED LUNG INJURY	
(SILICOSIS)	

Document Revision History:

Revision: 4	Date Created: 11/24/2014 Date of Last Revision: 06/09/2016	Last Approval Date: 04/20/2016
Document Author: Deb Cook	Document Manager: Wendy Hunt	

SDS Status:

Disclaimer

Information contained within this safety data sheet is based on the current state of knowledge and relates to such products, their intended usage and the required safety precautions . Although every effort has been made to ensure that this information is correct and gives adequate safety margins in line with current knowledge , it does not constitute a specification and no information for other purposes , particularly information regarding properties of the delivered materials, may be inferred. Determination of the technical suitability of each material and complying with any guidance relating to safe usage remain the sole responsibility of the user . Consequently, beyond any separately agreed contractual arrangements , the aforementioned manufacturer and its subsidiaries exclude any and all liability resulting from the use of the product. Unknown hazards may be inherent in all materials ; therefore these materials shall be treated with caution. Although certain hazards are described herein , we are unable to guarantee that these are the only hazards.

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